

What is Claimed is:

1. A coaxial cable connector comprising:

5 a first cable holder;

a second cable holder which can be engaged to said first cable holder by pressing;

a housing to which an assembly made by engaging of said first cable holder and said second cable holder can be engaged;

10 at least one gripping conductor and gripping conductor extension extending therefrom which are located in said first cable holder in an insulated condition; and,

a plurality of contact elements and external cable connection terminals connected thereto which are located in
15 said housing in an insulated condition,

wherein,

each cable holder has grooves for receiving an inner insulator exposed portion and an outer conductor exposed portion of a coaxial cable formed at one end thereof,

20 said gripping conductor each grips said outer conductor exposed portion of the coaxial cable, and

said gripping conductor extensions each engages with corresponding contact element, and a central conductor of the coaxial cable in the outer conductor exposed portion engages
25 with corresponding contact element.

2. A coaxial cable connector according to claim 1, wherein said first cable holder comprises:

a block body;

30 at least one first inner insulator exposed portion

receiving grooves that is formed on a first surface of the block body and receives approximately half of a cross-sectional portion of the inner insulator exposed portion of the coaxial cable;

5 at least one first outer conductor exposed portion receiving grooves that is formed to continue from a rear end of the first inner insulator exposed portion receiving groove and receives approximately half of a cross-sectional portion of the outer conductor exposed portion of the coaxial cable;

10 at least one first original-diameter end portion receiving grooves that is formed to continue from a rear end of the first outer conductor exposed portion receiving groove, and receives approximately half of a cross-sectional portion of an original-diameter end portion;

15 wherein, said gripping conductor is disposed in the first outer conductor exposed portion receiving groove, and said gripping conductor extension extends from said gripping conductor to a direction of the front end of the coaxial cable in parallel with the first outer conductor exposed portion receiving groove,

20 said second cable holder comprises:

 a block body;

25 at least one second inner insulator exposed portion receiving grooves equal in number to the number of the first inner insulator exposed portion receiving groove of the first cable holder, that is formed on a first surface of the block body and receives approximately half of a cross-sectional portion of the inner insulator exposed portion of the coaxial cable;

30 at least one second outer conductor exposed portion

receiving grooves that is formed to continue from a rear end of the second inner insulator exposed portion receiving groove and receives approximately half of a cross-sectional portion of the outer conductor exposed portion of the coaxial cable; and

5 at least one second original-diameter end portion receiving grooves that is formed to continue from a rear end of the second outer conductor exposed portion receiving groove, and receives approximately half of a cross-sectional portion of the original diameter portion of the coaxial cable,

10 wherein, after positioning the outer conductor exposed portion of the coaxial cable to be matched with a position of the gripping conductor of the first cable holder, the first surface of the first cable holder being pressed against the first surface of the second cable holder to face
15 each other so that they are engaged with each other and the second outer conductor exposed portion receiving groove presses the gripping conductor in deformation and thereby grip the outer conductor exposed portion of the coaxial cable,

said housing comprises:

20 a block body, to which said assembly by engaging said first cable holder and said second cable holder are engaged by pressing;

25 at least one first contact elements equal in number to the number of the first inner insulator exposed portion receiving groove of the first cable holder, mounted on a first surface of the block body and is capable of engaging with the central conductor of the inner insulator exposed portion of the coaxial cable at the engagement time; and

30 at least one second contact elements equal in number to the number of the first inner insulator exposed portion

receiving groove of the first cable holder, mounted on the first surface of the block body and is capable of engaging with the gripping conductor extension that is disposed on the first cable holder upon engagement,

5 wherein, said first contact element being connected to an insulated external cable connection terminal for the central conductor via an insulated connection member for said first contact element, and said second contact element being connected to an insulated external cable connection terminal
10 for the outer conductor via an insulated connection member for said second contact element,

 wherein, said first cable holder and said second cable holder are fitted with complementary engaging units respectively for mutually engaging the two cable holders, and
15 at least one of the first cable holder and the second cable holder, and the housing are provided with complementary engaging units respectively for mutually engaging the cable holder assembly and the housing.

20 3. The coaxial cable connector according to claim 2, wherein the first contact element and the second contact element have cuts formed on plate members that are mounted on the block body of the housing respectively.

25 4. The coaxial cable connector according to claim 1, wherein the gripping conductor extension has projections that stretch perpendicularly in a longitudinal direction, and the projections are engaged with holes formed on the first cable holder, and are held at predetermined positions.

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5. The coaxial cable connector according to claim 1, wherein the gripping conductor has projections that stretch perpendicularly in a longitudinal direction, and the projections are engaged with holes formed on the first cable holder, and are held at predetermined positions.

6. The coaxial cable connector according to claim 1, wherein the gripping conductor has a pressed portion that is pressed and deformed, and a base portion to which one side of the pressed portion is integrally connected, the gripping conductor extension is connected to a first end of the base portion near the front end of the coaxial cable, and staged projections that bite into the original-diameter end portion and are capable of gripping the original-diameter portion are formed on a second end of the base portion far from the front end of the coaxial cable.

7. A coaxial cable harness unit that is formed by using any one of the coaxial cable connectors according to claim 1.